New approach to extracting fossil fuels has benefits

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Fossil fuels continue to drive our economy, as well as most of our cars. So it's worth pursuing a new approach with economic and environmental benefits: using carbon dioxide (CO2) as a fracturing fluid, incentivized by a new development in the federal tax code. This technique creates a win-win-win: increased domestic oil and natural gas production with lower environmental impact, including permanently sequestering CO2 underground, which helps maintain earth-system balance.

Recent research by the Computational Earth Science group at Los Alamos National Laboratory has demonstrated that using CO2 for carbon capture, utilization and storage (CCUS) can be commercially viable under the recently revised 45Q tax regulation. This carbon sequestration technique involves catching CO2 waste emitted by sources like fossil fuel plants, using it in another industrial process like energy extraction, then storing it underground. The Los Alamos research studied applying this technique to what's known as enhanced oil recovery, or extracting resources from wells that have become unproductive through conventional drilling.

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